

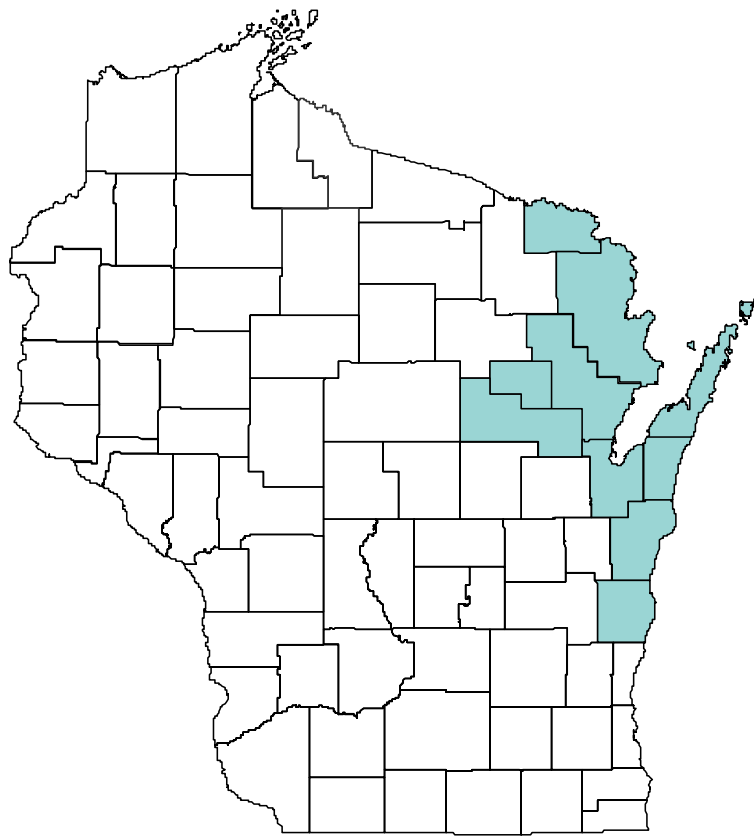
Workforce Development Area Profile

Bay Area Wisconsin

Brown, Door, Florence, Kewaunee, Manitowoc, Marinette,
Menominee, Oconto, Shawano, and Sheboygan Counties.

The labor market is a constant ebb and flow of supply and demand. Too little demand for workers creates too much supply and unemployment increases. But too little supply of workers means job vacancies and lack of employment growth.

Every Workforce Development Area in the state should anticipate a tight labor supply condition by the end of the next decade. Planners in each area must understand the unique set of employment characteristics in their region to development a strategy to meet a future where demand will exceed supply.



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State of Wisconsin
Department of Workforce Development
Office of Economic Advisors
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Industry employment and projections

This profile centralizes current and projected industry, occupation, labor force and demographic information based upon requests and feedback from a diverse customer-base. It has been developed to assist those in workforce and economic development to understand the economic and demographic directions of their communities.

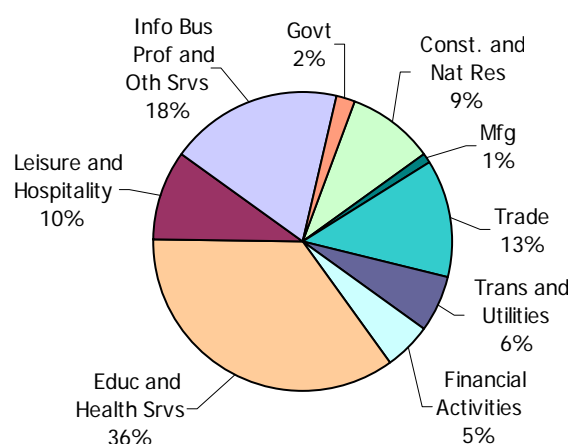
The total number of nonfarm jobs in the ten county Wisconsin Bay Area Workforce Development Area (Brown, Door, Florence, Kewaunee, Manitowoc, Marinette, Menominee, Oconto, Shawano and Sheboygan Counties) is projected to increase 11.9 percent (+35,980 jobs) for a total of 338,060 jobs by the year 2012. Goods-producing sectors in the regional economy will represent nearly 29 percent of the total employment in the region by 2012 down from just under 31 percent in 2002. Goods-producing industries include construction/mining/natural resources and manufacturing. Services-providing industry sectors will increase from 69 percent of all employment to about 71 percent. The table at the bottom of the page lists the region's industry sector growth forecast.

The education and health services sector is projected to show the largest numeric employment growth adding 12,620 jobs between 2002 to 2012. Ambulatory health care services will make up the largest portion of the increase by adding nearly 4,000 jobs for a growth rate of 40 percent. This is the fastest growth rate for all industry sectors in the Bay Area. Another 2,400 jobs will be added from growth in hospital

services. The educational services component industry, which includes both publicly and privately owned establishments, will have nearly twice the growth rate of all industries and about one third of the new jobs over the time period will be in this broad industry sector.

Manufacturing is currently the largest employing industry sector in the region and will remain the largest industry sector in 2012, however, other industry sectors will continue to close the gap over the period. Manufacturing employment

Distribution of Job Growth by Industry Sectors in Bay Area Wisconsin: 2002 - 2012



Industry Projections for Bay Area Workforce Development Area, 2002-2012

Industry Title	Employment		Ten-year change	
	2002 Estimate	2012 Projected	Numeric	Percent
Total Non-farm Employment	302,080	338,060	35,980	11.9%
Construction/Mining/Natural Resources	15,820	19,170	3,350	21.2%
Manufacturing	77,690	78,180	490	0.6%
Paper Mfg	9,900	8,520	-1,380	-13.9%
Plastics and Rubber Products Mfg	5,450	6,640	1,190	21.8%
Transportation Equipment Mfg	5,470	5,860	390	7.1%
Trade	42,270	46,840	4,570	10.8%
Building Material and Garden Equipment and Supplies Dealers	3,000	3,550	550	18.3%
Transportation and Utilities (Including US Postal)	15,760	17,900	2,140	13.6%
Financial Activities	15,120	16,990	1,870	12.4%
Education and Health Services (Inclg state & local govt. ed. & hosp.)	50,170	62,790	12,620	25.2%
Ambulatory Health Care Services	9,890	13,860	3,970	40.1%
Hospitals (Including state & local govt.)	11,150	13,590	2,440	21.9%
Leisure and Hospitality	27,360	30,950	3,590	13.1%
Information/Prof Services/Other Services	38,510	45,150	6,640	17.2%
Government (Excluding USPS, state & local govt. ed. and hosp.)	19,390	20,100	710	3.7%

Source: WI DWD, Office of Economic Advisors, September 2004

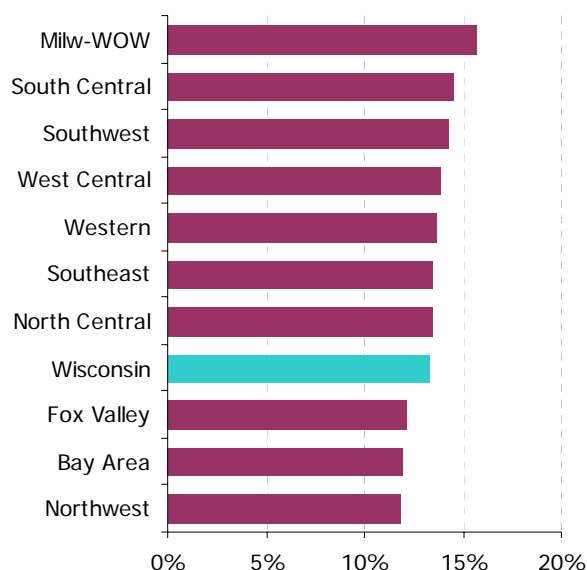
growth is forecast to be limited adding 490 new jobs from 2002. The negligible increase in new jobs will not lessen the need for skilled production workers as skilled workers will be needed to fill the many vacancies created as workers from the baby-boom generation begin to retire during the ten-year period. This will be discussed in more detail in the profile's section detailing occupational projections.

The other goods-producing sector; construction, mining and natural resources will show much faster employment growth in comparison to the manufacturing sector gaining 3,350 jobs (+21.2%) over the projection period. It is estimated that construction industry employment, alone, makes up close to 90 percent of this sector's employment and therefore will be the major contributor to this sector's growth. Though it comprises just over five percent of the region's total employment, construction's importance is underscored due to its role in economic and infrastructure development as well as the higher than average annual wages it pays its workers (\$36,575 in 2003).

The information, professional, business and other services sector is an amalgam of many component industries, many of whom have relationships or support roles with other local industry sectors. Its employment is projected to grow strongly (6,640) providing the second greatest number of new jobs in the region of all the industry sectors. Examples of this sector's component industries include newspaper publishers, computer systems designers, law firms, temporary employment agencies, travel agencies and scientific testing laboratories. The majority of this broad sector's employment, about one-third of it, is based in professional and business services employment, which has large contingent of its workers employed by employment placement agencies and temporary employment agencies. Employment via these agencies has grown incredibly fast recently indicating a rebound in the economy. Various employers have found it easier to contract with these agencies to find immediate help for their newly increasing workloads. These contracted workers are placed among many industries, but it is likely that most of this increased personnel in the Bay Area has been directed to manufacturers. Other industries in this sector, such as accounting firms and advertising services, also cluster around client establishments.

Industry sectors projected to show the least dynamic change in the Bay Area include government employment (710) (excluding education and health care establishments) and manufacturing (490) activities. The latter sector is projected to grow at only 0.6 of a percent during the time period. The slow growth is linked to projections in the paper manufacturing industry sector which is expected to decline by 1,380 jobs over the period. Much of the decline will be due

Changes in Employment for Workforce Development Areas in Wisconsin: 2002 - 2012



Source: WIDWD, Office of Economic Advisors, Sept. 2004

to company mergers, over capacity in the industry as well as productivity increases. This has been occurring in the industry since the late 1990's in the Bay Area. Three counties generally account for the majority of paper products in the region (Brown, Oconto and Marinette Counties). Government employment includes a combination of local and state government establishments and includes local services as well as the state services and the prisons in Brown and Sheboygan Counties. The slow growth in government employment (3.7%) will be related to current and future budget restrictions faced by these institutions as they deal with fiscal shortages.

Every major industry sector in the Bay Area is projected to experience at least minimal employment growth. The Bay Area's total employment growth will be bit lower than state average and will rank in the bottom of the WDA pack as shown in the above graph.

Industry projections are a good start to regional analysis, but they need to be complemented with occupational analysis and population research. These topics will be discussed further into the profile. The region's age demographics, more specifically its aging population, will be the most significant factor in its industrial and occupational changes as well as the labor force's pool of workers. Changes in the growth of the area's labor force in the future will affect the expansion and growth of businesses in the area. Also, the age of the population will affect the type of industries in the area's based on the population needs.

Employment and wages

Bay Area all industry wages, are very similar to Wisconsin's 2003 annual average for all industries. The highest paying sector in the Bay Area is manufacturing, which is also its highest paying statewide. Manufacturing wages in the area are at 94 percent of the statewide average. The lowest paying industry, relatively speaking, is other services sector paying 83 cents to its workers for every dollar of the statewide average.

The graph below distributes each sector's percentage share of total employment and total payroll in the region. For example, as of 2003, manufacturing represented 25 percent of all regional jobs, but comprised a significantly higher share, 31 percent, of the total wages paid.

Annual industry sector wage levels are chiefly dictated by their component industries' and the workers' occupations in their employ. They are also influenced by geographic location, lengths of workweeks, seasonal duration, and unionization. The manufacturing sector is a great example of this.

2003 Average Annual Wage by Industry Division in Bay Area WDA

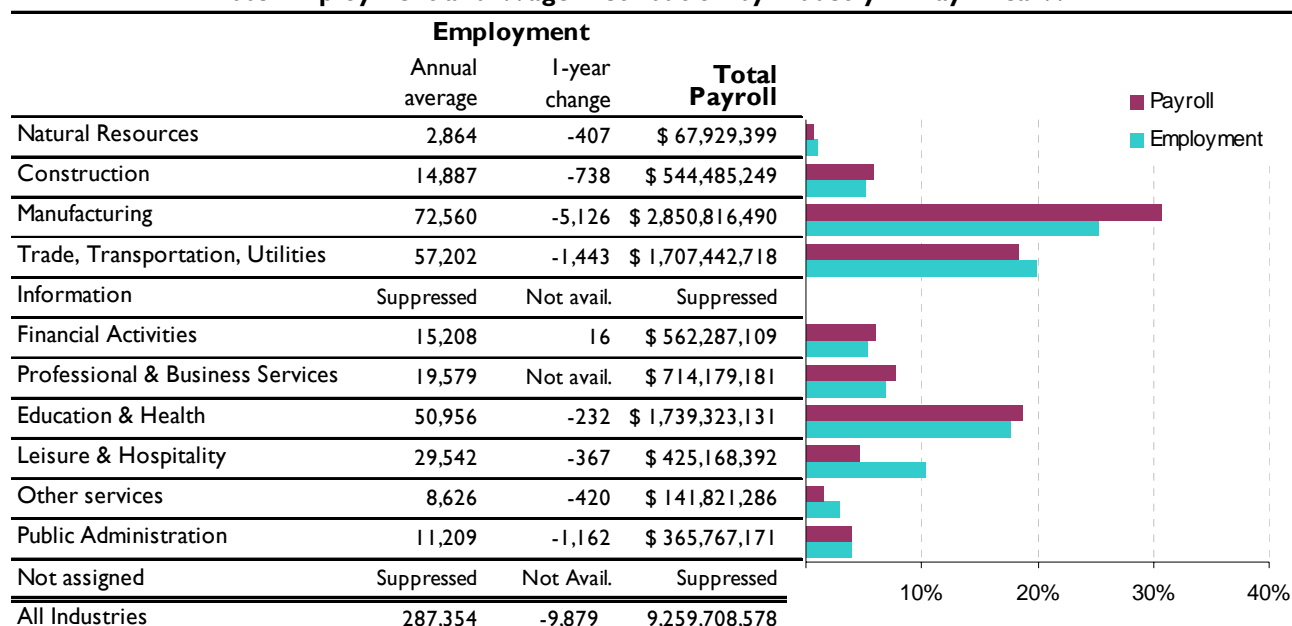
	Average Annual Wage Wisconsin	Bay Area	Percent of Wisconsin	1-year % change
All Industries	\$ 33,423	\$32,224	96%	3.5%
Natural resources	\$ 25,723	\$23,718	92%	0.6%
Construction	\$ 40,228	\$36,575	91%	0.5%
Manufacturing	\$ 42,013	\$39,289	94%	3.1%
Trade, Transportation, Utilities	\$ 28,896	\$29,849	103%	3.3%
Information	\$ 39,175	Not avail.	Not avail.	Not avail.
Financial activities	\$ 42,946	\$36,973	86%	8.1%
Professional & Business Services	\$ 38,076	\$36,477	96%	Not avail.
Education & Health	\$ 35,045	\$34,134	97%	3.0%
Leisure & Hospitality	\$ 12,002	\$14,392	120%	1.3%
Other services	\$ 19,710	\$16,441	83%	1.8%
Public Administration	\$ 35,689	\$32,632	91%	6.2%

Source: WI DWD, Bureau of Workforce Information, Quarterly Census of Employment & Wages

* Note: Menominee County data is not included in the above table.

The breakout of industries varies greatly from the chart below when compared to individual counties. The Bay Area currently has two MSA Counties, and these two metropolitan counties have a variety of characteristics influencing these high wages such as unionized production workers and corporate headquarters with executive ranked management, both of whom tend to command higher than average wages.

2003 Employment and Wage Distribution by Industry in Bay Area WDA



Source: WI DWD, Bureau of Workforce Information, Quarterly Census of Employment & Wages

Significant industries

Top Five Industries in Bay Area WDA

Industry	March-2004		Numeric Employment Change	
	Establishments	Employees	2003 - 2004	1999 - 2004
Educational Services	122	20,893	-54	1,575
Food Services and Drinking Places	1,096	20,380	886	1,791
Fabricated Metal Product Manufacturing	216	13,533	-974	-3,024
Hospitals	15	12,027	360	2,157
Ambulatory Health Care Services	586	10,193	218	2,006

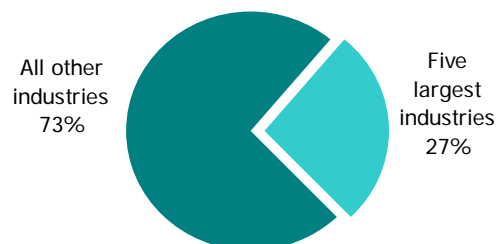
Source: DWD, Bureau of Workforce Information, Quarterly Census of Employment and Wages

The top 5 industries list, above, is more industry-specific than the industry sector lists on pages 1 and 2, which are a broader classification. The Bay Area's five largest industries as of March 2004 accounted for just over one out of every four regional jobs.

The following pages take a closer look at the Bay Area's top 5 industries detailing their 20 largest occupations (listed in descending order via statewide occupational patterns as region-specific patterns are not available). The only classification from manufacturing represented is fabricated metal product manufacturing.

A brief description of these industries and the top 20 occupations that are projected to have the most job gain by 2012 follows. The occupations listed reflect Wisconsin trends for the industry (local data is not available).

Share of jobs in top five industries in Bay Area WDA



I. Education Services

This industry includes both publicly and privately-owned establishments. The majority of this sector's employment is in K-12 public school districts and technical college campuses, which are part of local government ownership. The area has one four year University of Wisconsin campus in Green Bay, and several two year campuses located throughout the region. Parochial schools and private colleges are also included in this industry.

Total employment is expected to increase by 15 percent from 2002 to 2012 providing nearly 2,800 more jobs. Most of the occupational needs will be K-12 teachers and support staff. The impetus for this sector's growth and top ranking is rooted both demographically and economically. Although not all areas within the region will see the growth in this industry. Several of the more rural counties have aging populations with a smaller portion of the population being of school age. This will be offset by growth in the more urban areas that have younger populations and greater family in-migration.

Economically, the current and projected changes in the area's job base have increased the demand for skills training and re-training at the region's technical college campuses. Vocational training and other forms of adult education will likely maintain their appeal over the short- and medium-term.

Top 20 Occupations in Wisconsin in Education Services Ranked by number of jobs projected in 2012

- Elementary School Teachers, Except Special Education
- Secondary School Teachers, Except Special and Vocational Education
- Teacher Assistants
- Middle School Teachers, Except Special and Vocational Education
- Janitors and Cleaners, Except Maids and Housekeeping Cleaners
- Vocational Education Teachers, Postsecondary
- Education Administrators, Elementary and Secondary School
- Health Specialties Teachers, Postsecondary
- Special Ed. Teachers, Preschool, Kindergarten, and Elementary School
- Kindergarten Teachers, Except Special Education
- Educational, Vocational, and School Counselors
- Executive Secretaries and Administrative Assistants
- Cooks, Institution and Cafeteria
- Office Clerks, General
- Special Education Teachers, Secondary School
- Vocational Education Teachers, Secondary School
- Special Education Teachers, Middle School
- Librarians
- Business Teachers, Postsecondary
- Bus Drivers, School

Source: WI DWD, Office of Economic Advisors, Sept. 2004

II. Food Services and Drinking Places

This industry is usually one of the top five employers in all the state's region, frequently in the top three spots as well as nationally. It is a component industry within the leisure and hospitality sector, which is projected to show just above average growth in the Bay Area.

The majority of employment this industry is in full-service and fast food restaurants. Serving related occupations and food preparation provide the greatest number of jobs in the industry.

This industry has experienced continued growth over the last several decades. Although its projected growth rate of just 13 percent over the next decade is not substantially greater than the region's growth as a whole, the size times the growth rate makes it a significant factor in the regional economy.

Many of the jobs in the sector are entry-level and are paid commensurate to low-skilled employment. Employment durations can be very seasonal and the length of workweeks weigh heavily towards part-time schedules. Census data from 2000 estimate an average workweek of about 31 hours and a work-year of about 43 weeks for those working in this industry. Some jobs are high skill and offer good wages, while other are dependant on tips and often offering opportunities for better wages.

III. Fabricated Metal Product Manufacturing

Fabricated metal product manufacturing is the only component from the manufacturing sector that shows up in the five largest sectors in the Bay Area, although manufacturing as a group remains as one of the largest industry groups in the area, many of the components are smaller. Paper manufacturing while large and important in the area is primarily concentrated in only three of the region's ten counties.

Despite losses in employment over the last five years, employment in this sector is projected to increase slightly by 2012. However, the growth rate (2.5 percent) is well below the 11.9 percent projected for all industries in the Bay Area. While additional growth is good, most likely employment levels will not return to 1999 levels during the projection period.

Occupations in this sector are requiring higher skills levels than in the past, including entry level jobs. Many of the jobs require post high school course work which is generally available through the region's technical colleges. Those positions that do not require advance skills often require good math skills and some rudimentary computer skills.

Top 20 Occupations in Wisconsin in Food Services and Drinking Places Ranked by number of jobs projected in 2012

Waiters and Waitresses
Combined Food Preparation and Serving Workers, Including Fast Food
Bartenders
Cooks, Restaurant
Cooks, Fast Food
First-Line Supervisors/Managers of Food Preparation and Serving Workers
Dishwashers
Cooks, Short Order
Food Preparation Workers
Dining Room and Cafeteria Attendants and Bartender Helpers
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop
Food Service Managers
Chefs and Head Cooks
Cashiers
Janitors and Cleaners, Except Maids and Housekeeping Cleaners
Driver/Sales Workers
General and Operations Managers
Truck Drivers, Light or Delivery Services
Bookkeeping, Accounting, and Auditing Clerks

Source: WI DWD, Office of Economic Advisors, Sept. 2004

Top 20 Occupations in Wisconsin in Fabricated Metal Product Manufacturing Ranked by number of jobs projected in 2012

Machinists
Welders, Cutters, Solderers, and Brazers
Team Assemblers
Cutting/Punching, & Press Mach. Setters, Operators, & Tenders, Mtl-Plastic
First-Line Supervisors/Managers of Production and Operating Workers
Computer-Controlled Machine Tool Operators, Metal and Plastic
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic
Grinding/Lapping/Polishing/Buffering Mach.Tool Setters/Oprs/Tenders, Mtl-Plstc
Helpers--Production Workers
Materials Engineers
Maintenance and Repair Workers, General
Structural Metal Fabricators and Fitters
Electricians
Lathe & Turning Machine Tool Setters, Operators, & Tenders, Metal-Plastic
Inspectors, Testers, Sorters, Samplers, and Weighers
Mechanical Engineers
Chemical Equipment Operators and Tenders
Laborers and Freight, Stock, and Material Movers, Hand
General and Operations Managers
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders

Source: WI DWD, Office of Economic Advisors, Sept. 2004

IV. Hospitals

This component industry of the education and health services sector employs over 12,000 workers in the Bay Area. Hospitals have been a part of the most dynamically growing sector in the United States. Hospital employment, along with other healthcare related component industries, will continue to a greater effect on the economy in the coming years because of its growth rate combined with the magnitude of its current employment. Not only has this sector added employment in the past, it is anticipated that employment in this sector will be well above the regional average.

The list of its major occupations vary in those involving direct patient care and non-patient care. This is important to note because some job seekers may not understand that many occupations in the health care setting do not require medical training. Registered nursing unsurprisingly tops the list as it is easily the most discussed occupation in health care, and possibly in the overall economy, as nursing shortages exist. Many other health care related occupations are likely to experience shortages such as physicians and pharmacists.

The growth of hospital employment is in response to consumer demand. The region's larger, older population will consume more health services.

Top 20 Occupations in Wisconsin in Hospitals Ranked by number of jobs projected in 2012

Registered Nurses
Nursing Aides, Orderlies, and Attendants
Licensed Practical and Licensed Vocational Nurses
Maids and Housekeeping Cleaners
Radiologic Technologists and Technicians
Medical and Clinical Laboratory Technologists
Medical and Health Services Managers
Physical Therapists
Janitors and Cleaners, Except Maids and Housekeeping Cleaners
Respiratory Therapists
Interviewers, Except Eligibility and Loan
Medical Secretaries
Surgical Technologists
Receptionists and Information Clerks
Medical Transcriptionists
Medical Assistants
Food Servers, Nonrestaurant
Medical Records and Health Information Technicians
Secretaries, Except Legal, Medical, and Executive
Occupational Therapists

Source: WI DWD, Office of Economic Advisors, Sept. 2004

V. Ambulatory Health Care Services

This industry utilizes many of the same occupations as does the hospitals, albeit in different settings. Included in this component industry would be dental offices, clinics, outpatient services and nursing homes. Of the five largest groups listed in this publication, this component has the fewest employees, but the second greatest number of establishments. This is because it includes a large number of smaller businesses where there may be only three to ten employees. An example might be a dentist office.

This area has shown steady growth over the last five years. This is in part due to an aging population in the region as well as a generation that has grown more health conscious over the last several decades.

The industry is expected to continue to grow over the projection period adding over 3,900 new jobs. This industry component has the second greatest growth of jobs in the Wisconsin Bay Area.

Top 20 Occupations in Wisconsin in Ambulatory Health Care Services Ranked by number of jobs projected in 2012

Registered Nurses
Receptionists and Information Clerks
Dental Assistants
Medical Assistants
Dental Hygienists
Office Clerks, General
Medical Secretaries
Licensed Practical and Licensed Vocational Nurses
Medical Records and Health Information Technicians
Dentists
Nursing Aides, Orderlies, and Attendants
Internists, General
Emergency Medical Technicians and Paramedics
Personal and Home Care Aides
Billing and Posting Clerks and Machine Operators
Family and General Practitioners
Medical Transcriptionists
First-Line Supervisors/Managers of Office & Administrative Support Workers
Home Health Aides
Executive Secretaries and Administrative Assistants

Source: WI DWD, Office of Economic Advisors, Sept. 2004

Occupation projections

Occupational Group Summary for Bay Area Workforce Development Area

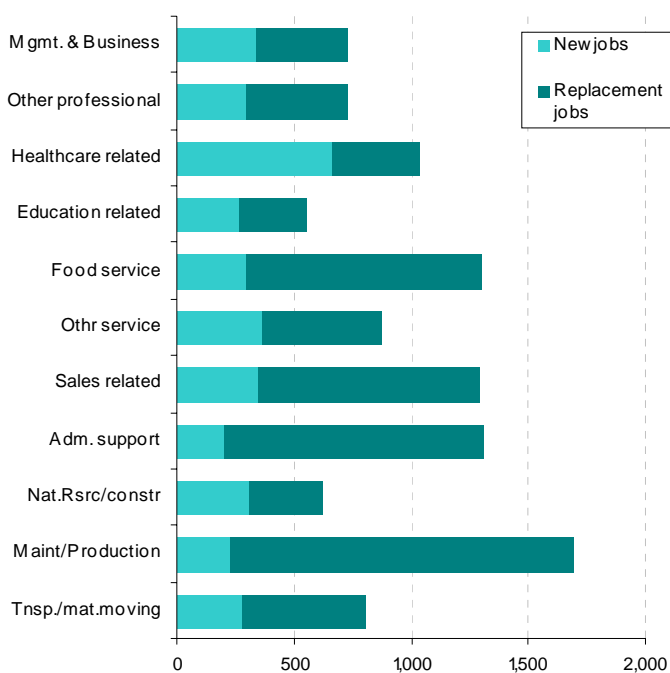
Occupational Groups	Estimated Employment		2002 - 2012 Change		Annual average			Average hourly wage	Annual average wage
	2002	2012	Numeric	Percent	New Jobs	Replacements	Total Openings		
Total, All Occupations	302,080	338,060	35,980	11.9%	3,600	7,330	10,930	\$15.68	\$32,605
Management, Business & Financial Operations	21,050	24,440	3,390	16.1%	340	390	730	\$29.70	\$61,780
Computer, Math, Architecture & Engineering	10,090	11,320	1,230	12.2%	130	200	330	\$25.36	\$52,759
Life & Social Sciences, Legal, Art & Entertaining	11,660	13,430	1,770	15.2%	170	230	400	\$19.40	\$40,361
Education, Training, & Library	13,660	16,260	2,600	19.0%	260	290	550	\$17.92	\$37,270
Healthcare Practitioners, Technicians & Support	21,660	28,230	6,570	30.3%	660	380	1,040	\$19.99	\$41,585
Food Preparation & Serving	25,090	28,110	3,020	12.0%	300	1,000	1,300	\$8.18	\$17,005
Protective, Maintenance & Personal Care Service	21,940	25,640	3,700	16.9%	370	510	880	\$11.31	\$23,529
Sales and Related	27,270	30,780	3,510	12.9%	350	940	1,290	\$13.69	\$28,469
Office/Administrative Support	48,060	50,100	2,040	4.2%	200	1,110	1,310	\$12.88	\$26,784
Natural Resources, Mining & Construction	15,540	18,650	3,110	20.0%	310	310	620	\$18.27	\$38,001
Installation, Maintenance, Repair & Production	61,000	63,260	2,260	3.7%	230	1,460	1,690	\$14.97	\$31,140
Transportation/Material Moving	25,080	27,840	2,760	11.0%	280	530	810	\$13.79	\$28,682

Source: Wisconsin Department of Workforce Development, Office of Economic Advisors, September 2004

The occupation projections for Wisconsin's Bay Area over a ten-year period that ends in 2012 include 35,980 new jobs created when employers move to the area and when existing employers expand. The projections also include 109,300 additional job openings generated when workers leave an

occupation and create a need for a replacement worker. An example of this would be a nurse aide who, after completing training, becomes a registered nurse or retires. Replacement needs do **not** include an opening that occurs when a nurse aid leaves one employer to work for another in the same occupation.

Annual Openings by Occupation Groups in Bay Area WDA



Source: WI DWD, Office of Economic Advisors, September 2004

The total number of jobs in occupations will increase from 302,080 in 2002 to 338,060 by 2012. The greatest increase occurs in healthcare occupations with the addition of 6,570 jobs, or 18.3 percent of all new jobs. The share of jobs in healthcare increases from 7.1 percent to 8.4 percent of all jobs in the Bay Area WDA. This occupation not only is adding the most new jobs over the period, but it also has the fastest growth rate of all of the occupational groups.

Protective, maintenance and personal care service is a very broad group of occupations that will add an additional 3,700 jobs over the ten year period. Other strong growth occupations in the area include: Sales and Related; Management, business and financial operations and natural resources, mining and construction. Most of these occupations will be in the construction sector. Mining in the Bay Area is primary in the form of stone quarries.

Although the share of total jobs in installation, maintenance, repair and production occupations, will decline from 20.2 percent of all jobs to 18.7 percent in 2012, it will continue to have the greatest quantity of jobs in the Bay Area. The second greatest share of jobs is in the office and

Twelve Occupations with the Most Annual Openings from 2002-2012 in Bay Area Workforce Development Area

Occupational Title	Estimated Employment		2002-2012 Change		Annual average			Typical Education or Training Path	Average Wage	Middle 50 Percent Hourly Wage Range
	2002	2012	Numeric	Percent	New Jobs	Replacements	Total Openings			
Cashiers	7,460	8,220	760	10.2%	80	360	440	1 mo. or less trng. on-the-job	\$7.88	\$6.65 - \$8.82
Retail Salespersons	8,470	9,620	1,150	13.6%	120	310	430	1 mo. or less trng. on-the-job	\$10.14	\$7.41 - \$11.08
Waiters/Waitresses	5,340	6,080	740	13.9%	70	280	350	1 mo. or less trng. on-the-job	\$7.14	\$5.95 - \$7.67
Comb Food Prep/Server/Incl Fast	4,710	5,640	930	19.7%	90	200	290	1 mo. or less trng. on-the-job	\$7.62	\$6.22 - \$8.76
Truck Drivers/Hvy/Tractor-Trailer	6,560	8,000	1,440	22.0%	140	110	250	1-12 mo. training on-the-job	\$18.22	\$13.67 - \$21.84
Registered Nurses	4,800	6,280	1,480	30.8%	150	100	250	Bachelor's or Assoc. degree**	\$23.06	\$19.54 - \$26.25
Janitors/Cleanrs Ex Maids/Hskpng	4,990	5,660	670	13.4%	70	100	170	1 mo. or less trng. on-the-job	\$9.85	\$7.63 - \$11.32
Nursing Aides/Orderlies/Attndnts	4,430	5,430	1,000	22.6%	100	60	160	1 mo. or less trng. on-the-job	\$10.56	\$9.38 - \$11.72
Labrs/Frght/Stock/Matrl Movrs/Hand	4,750	4,610	-140	-2.9%	-140	160	160	1 mo. or less trng. on-the-job	\$11.24	\$8.55 - \$13.21
Office Clerks/General	5,170	5,490	320	6.2%	30	120	150	1 mo. or less trng. on-the-job	\$10.82	\$8.61 - \$12.58
Sls Reps/Whls/Mfg/Ex Tech/Sci	3,220	3,770	550	17.1%	60	90	150	1-12 mo. training on-the-job	\$27.25	\$17.78 - \$32.70
Team Assemblers	5,210	5,080	-130	-2.5%	-130	140	140	1-12 mo. training on-the-job	\$12.61	\$9.51 - \$15.55

Source: WI DWD, Office of Economic Advisors, September 2004

* may include classroom instruction ** depends on employer

administrative support occupations. This occupational groups follows a similar pattern declining from 15.9 percent of all jobs to 14.8 percent. In both occupational groups the number of replacement jobs is at least five times the number of new jobs.

boomers approach retirement age the need to fill replacement jobs looms on the horizon. The average age of all workers in 2000 was 39-40 years but that increased in occupations that require a degree.

Together, new jobs and replacement jobs, produce the total (annual) jobs openings projected for an occupation over the projection period. In nearly all occupation groups, except health related occupations, the number of replacement jobs exceeds the number of jobs created from growth. Both sources of job openings are important. Too often the focus is only on job growth and little attention is given to the vacancies generated from replacement needs. But as baby-

Looking at the chart on page 7 leaves no doubt that the occupation group that will have the most new jobs during the projection period is healthcare. There are 61 health related occupations in the WDA and registered nurses is the occupation projected to generate the most new jobs. Third on that list (not included in this profile) is nurse aides, orderlies and attendants. Both also appear on the list of most total annual openings (above).

Twelve Occupations with the Greatest Percent Change from 2002-2012 in Bay Area Workforce Development Area

Occupational Title	Estimated Employment		2002-2012 Change		Annual average			Typical Education or Training Path	Average Wage	Middle 50 Percent Hourly Wage Range
	2002	2012	Numeric	Percent	New Jobs	Replacements	Total Openings			
Medical Assts	640	1,020	380	59.4%	40	10	50	1-12 mos. training on-the-job	\$11.74	\$10.50 - \$13.07
Medcl Records/Health Info Techs	380	590	210	55.3%	20	10	30	Associate degree	\$11.80	\$9.52 - \$13.39
Home Health Aides	860	1,280	420	48.8%	40	10	50	1 mo. or less trng. on-the-job	\$9.56	\$8.34 - \$10.61
Netw Systms/Data Comm Analysts	210	310	100	47.6%	10	<5	10	Bachelor's degree	\$20.81	\$14.91 - \$26.14
Veterinary Technologists/Techs	160	230	70	43.8%	10	<5	10	Associate degree	\$10.79	\$9.24 - \$12.72
Dental Hygienists	440	630	190	43.2%	20	<5	20	Associate degree	\$24.68	\$23.42 - \$26.66
Dental Assts	690	980	290	42.0%	30	20	50	1-12 mos. training on-the-job	\$12.46	\$11.10 - \$13.68
Personal and Home Care Aides	1,150	1,630	480	41.7%	50	20	70	1 mo. or less trng. on-the-job	\$8.54	\$7.51 - \$9.77
Social/Human Service Assts	650	910	260	40.0%	30	10	40	1-12 mos. training on-the-job	\$13.13	\$10.74 - \$15.33
Respiratory Therapists	150	210	60	40.0%	10	10	20	Associate degree	\$18.89	\$16.40 - \$21.46
Physical Therapist Assts	150	210	60	40.0%	10	<5	10	Associate degree	\$17.11	\$14.95 - \$19.96
Occupational Therapists	280	390	110	39.3%	10	<5	10	Bachelor's degree	\$24.10	\$21.07 - \$27.43

Source: WI DWD, Office of Economic Advisors, September 2004

* may include classroom instruction ** depends on employer

The openings in the twelve occupations on the list on the top of page eight equals 17 percent of the total openings in the Bay Area. This includes two occupations, team assemblers and laborers, freight, stock, material movers and handlers, which is projected to lose jobs during the ten-year period.

Eight of the twelve jobs typically require very little training. These are good jobs for workers entering the labor force, attending school, work another job, or are seeking supplemental income. These jobs are often ignored, however, they offer potential that is often overlooked. Supervisors and middle-managers acquire experience from these jobs and are may promoted from within the company. Although wages are lower, there are opportunities within these occupations for high income. Waiters/waitresses is a good example where a worker can earn above-average wages while working fewer hours. Three occupations require intermediate training, while only one occupation, registered nurses, requires post secondary schooling.

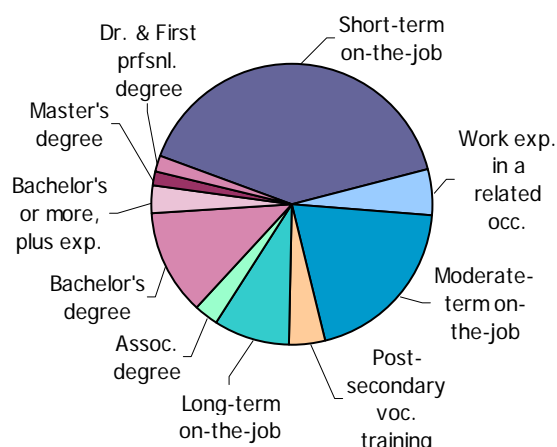
The list on the bottom of page eight also includes occupations with minimal training requirements but more of them require some training or a degree. Many times the occupations on this list, a.k.a. The Hot Jobs list, have smaller employment levels. The sum of the total openings in the twelve occupations on the bottom list represents only 3.4 percent of all total openings projected for the Bay Area.

Nine of the twelve occupations with the greatest percent increase are health care occupations. This does not include a related occupation of veterinary technologist/technicians. The fastest growing occupation in Bay Area and the nation is medical assistants. Employment in the occupation in the Bay Area will increase from 640 in 2002 to 1020 in 2012. Currently entry into the field preferred by most employers is

for graduates from a formal program in medical assisting. In the Bay area and Wisconsin these programs are most commonly offered by vocational schools. Medical assistants perform routine administrative and clinical tasks to keep medical offices running smoothly. That can vary from answering phones to taking medical histories and instructing patients about medications and special diets.

Following the baby-boom rush employers switched from in-house training to training provided by education institutions. Many jobs that typically were filled by someone with moderate- to long-term on-the-job training now require vocational training. Basic requirements for jobs with advanced degrees have not changed and only 18.8 percent of the total job openings projected will require a bachelor's degree or higher.

Distribution of Total Openings in Bay Area WDA by Training Path



Typical Education or Training Path* for Jobs in Bay Area Workforce Development Area

Education or Training	Number of Occupations	Estimated Employment		2002-2012 Change		Annual average			Distribution of Total Openings
		2002	2012	Numeric	Percent	New Jobs	Replacements	Total Openings	
Total	746	302,070	338,070	36,000	11.9%	3,610	7,350	10,960	100.0%
Associate degree	35	7,720	9,430	1,710	22.2%	170	140	310	2.8%
Bachelor's degree	108	35,120	41,490	6,370	18.1%	640	700	1,340	12.2%
Master's degree	37	5,270	6,200	930	17.6%	90	110	200	1.8%
First professional degree	16	2,480	3,140	660	26.6%	70	40	110	1.0%
Doctoral degree	40	1,740	2,240	500	28.7%	50	40	90	0.8%
Long-term on-the-job training	81	27,110	30,370	3,260	12.0%	330	600	930	8.5%
Moderate-term on-the-job training	170	74,020	79,670	5,650	7.6%	570	1,580	2,150	19.6%
Short-term on-the-job training	136	108,610	120,110	11,500	10.6%	1,150	3,290	4,440	40.5%
Bachelor's degree or more, plus work exp.	30	9,990	11,430	1,440	14.4%	140	190	330	3.0%
Work exp. in a related occupation	42	17,650	19,850	2,200	12.5%	220	370	590	5.4%
Postsecondary vocational training	51	12,360	14,140	1,780	14.4%	180	290	470	4.3%

* This provides a general indication of the education or training typically needed in occupations. There may be other pathways.

Source: WI DWD, Office of Economic Advisors, September 2004

Total personal income

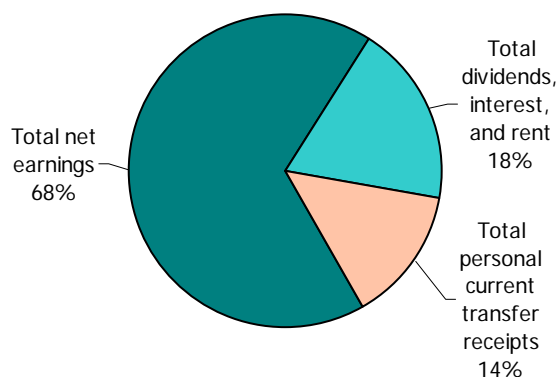
Total personal income is the sum of net earnings, income from dividends, interest and rent, and receipts from transfer payments. Just over two-thirds of total personal income (TPI) in the Bay Area comes from net earnings. Net earnings include wage and salary disbursements including employers contributions for pension, insurance and government social insurance, proprietor's income, and adjustment for residents who work in jobs outside the area.

Dividends, interest and rent receipts make up 18.5 percent of TPI in the WDA. And, 14 percent of TPI is from personal current transfer receipts. Transfer receipts include benefits from government social insurance funds and other programs.

In the last five years TPI increased 26.2 percent in the Bay Area, slightly less than Wisconsin and the United States. In spite of this growth in TPI per capita personal income increased only 22.2 percent, only slightly better than the United States, and slightly less than Wisconsin.

Per capita personal income (PCPI) is the product of total personal income divided by total population. If a greater share of residents are younger or older they contribute less (or not at all) to total income. A region that has a higher share of younger or older population will have a lower PCPI. Conversely, a population with a greater share of residents

Major Components of Total Personal Income in 2002 in Bay Area Workforce Development Area



Source: Special tabulation by WIOEA & US BEA files

middle-aged (and in their prime working years) will generally have a higher PCPI. Earnings from employment are the greatest source of total personal income.

The remaining 14 percent of TPI is from personal current transfer receipts. Transfer receipts include benefits from government social insurance funds, primarily social security and Medicare, and other programs. Unlike the first two components

Total Personal Income in Bay Area Workforce Development Area

% Change from 1997 to 2002

	1997	2002	Bay Area	Wisconsin	United States
Population	587,590	606,929	3.3%	3.3%	5.6%
Total Personal Income (in thousands)	\$13,844,282	\$17,469,974	26.2%	26.6%	28.8%
Net Earnings	\$9,286,869	\$11,796,930	27.0%	27.6%	30.4%
Dividends, Interest, and Rental Income	\$2,797,156	\$3,224,937	15.3%	14.9%	18.4%
Transfer Receipts	\$1,760,257	\$2,448,107	39.1%	39.4%	35.8%
Income Maintenance	\$99,309	\$119,712	20.5%	29.1%	21.3%
Unemployment insurance benefit payments	\$61,597	\$160,285	160.2%	147.2%	166.1%
Retirement and other	\$1,599,351	\$2,168,110	35.6%	36.9%	34.4%
Per Capita Personal Income	\$23,561	\$28,784	22.2%	22.6%	22.0%
Per Capita Net Earnings	\$15,805	\$19,437	23.0%	23.5%	23.4%
Per Capita Dividends, Interest, and Rental Income	\$4,760	\$5,314	11.6%	11.3%	12.1%
Per Capita Transfer Receipts	\$2,996	\$4,034	34.6%	35.0%	28.6%
Total Employment (see glossary)	360,887	383,601	6.3%	5.0%	7.3%
Wage and salary jobs	303,263	321,073	5.9%	4.3%	5.9%
Number of non-farm proprietors	48,297	53,388	10.5%	11.2%	16.0%
Average earnings per job	\$28,868	\$34,501	19.5%	21.0%	21.2%
Average wage & salary disbursements	\$26,027	\$30,735	18.1%	19.0%	21.1%
Average nonfarm proprietors income	\$16,864	\$21,451	27.2%	37.0%	24.7%

Source: Special tabulation by WI DWD, Office of Economic Advisors & US Dept. of Commerce, Bureau of Economic Analysis, May 2004

transfer receipts increased more rapidly in the latter years of the five-year period, the reason being the recession and retirements (which could be related to layoffs). Payments of unemployment insurance benefits rose 160 percent in the WDA from 1997 to 2002, an increase that was less than nation, but greater than the state or nation.

Currently there is a higher share of population under 20 in the Bay Area, 27 percent, and a smaller share aged over 65 years – 18 percent. These percentages are near the middle when compared to other areas in the state.

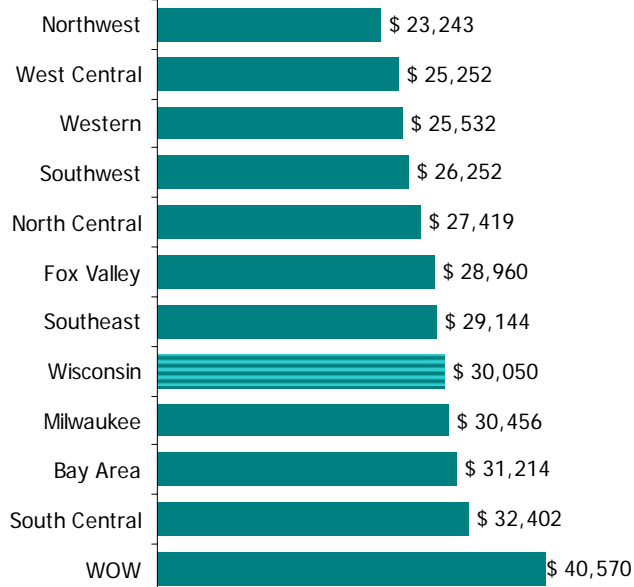
The Bay Area has the third highest PCPI of all of the WDAs in Wisconsin and is above the statewide average as well. One of the reasons for this is that the region contains two of the state's 11 metropolitan statistical areas (MSA). Generally wages are higher in metropolitan areas than they are in rural areas. The Green Bay MSA and the Sheboygan MSA make up about 60 percent of the population in the Bay Area MSA. As of January 2005, the Green Bay MSA has been expanded to include Brown, Kewaunee, and Oconto Counties. Prior to that, it only included Brown County.

Net earnings of PCPI for the Bay Area was \$21,078, this was fourth highest in the state. The area ranked third in income from dividends, interest and rent. Income from transfer payments was fourth highest in the state at \$4,374. The combination of all sources placed total PCPI for the Bay Area as the third highest WDA in the state.

The bottom chart graphically displays the per capita income by major component for each workforce development area. In all WDAs net earnings greatly exceed transfer receipts and dividends, interest and rent. But the income from the latter

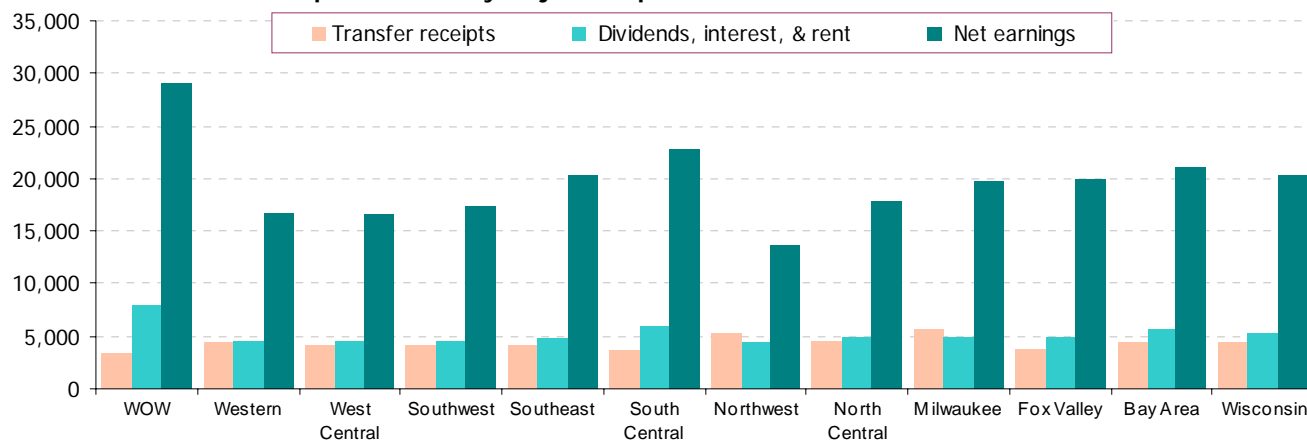
component varies by region and reflects the affluence of the area.

Per Capita Personal Income by WDA



Source: US Dept. of Commerce, Bureau of Economic Analysis

Per Capita Income by Major Components of Total Personal Income: 2002



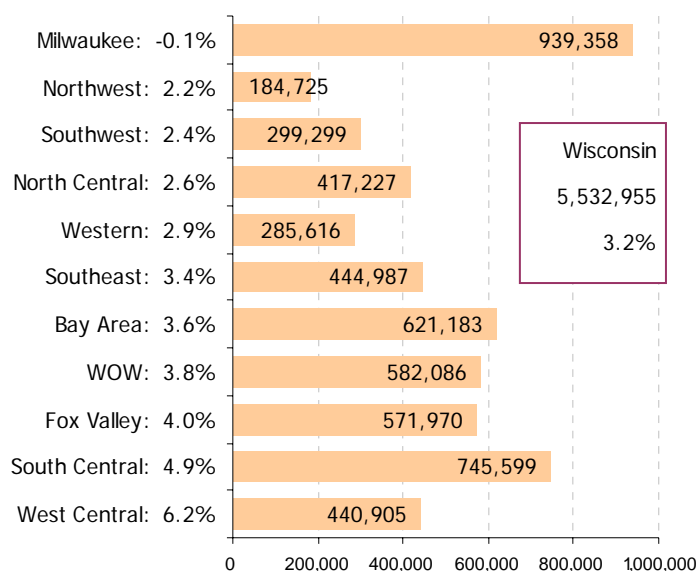
Source: Special tabulation by WI DWD, Office of Economic Advisors & US Dept. of Commerce, Bureau of Economic Analysis

Connecting the Elements

Population dynamics have always been key in workforce and economic development. Very simply, they are the pool of workers and they set the tone as consumers of our goods and services fueling two-thirds of the overall economy.

The Wisconsin Bay Area population was just over 621,000 in

2004 WDA Population and Percent Change from 2000



Source: WI Dept. of Administration, Demographic Services Center

2004. The WDA makes up just over eleven percent of Wisconsin's population. Since 2000, the region has added nearly 21,500 more residents for a growth rate of 3.6 percent. The rate of growth in the WDA was just above the statewide growth rate of 3.2 percent over the same time period.

Population change is the net result of two occurrences, migration and natural change. A fundamental understanding of these occurrences gives more insight than just the simple overall population change of plus or minus. The region's increase of 21,478 residents over the last four years was 7,502 from natural increase (births minus deaths) and 13,976 from net migration (number moving to area minus number moving away from the area). Basically, for every increase of three residents, two of those are from outside of the Bay Area.

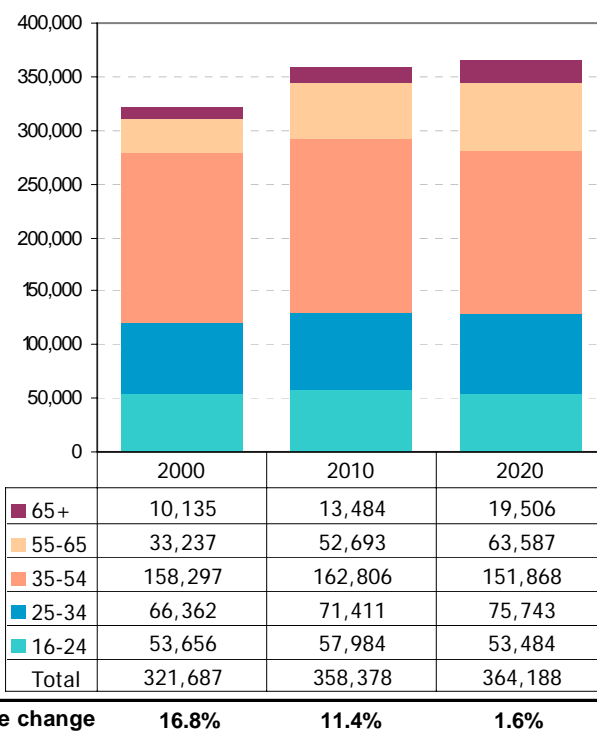
Population change has an impact on current and forthcoming development endeavors, be they economic or workforce

development need to be cognizant of the impact demographic features and anticipated changes in the region's population. It is critical they have an awareness of the area's projected age characteristics and its effects on consumer behavior and the workforce.

Population projections for the period 2005 to 2030 in the Bay Area forecast growth over 94,600 more residents (+15.2 percent). Brown County will have the greatest growth of the ten counties in the region. The region's projected growth is a very close to the statewide growth rate of 15 percent.

There has been a great deal of discussion concerning Wisconsin's aging population. This has also been a national issue, but it is likely to become a more salient one in the Midwest United States. A great deal of the discussion relates to the movement of the historically large "baby boomer" generation (population born between 1946—1964) as it moves through its life's stages and now the first members of that generation are close to retirement age. The following two generational groups following this large group are comparatively smaller. To put the size of the boomer generation in perspective, today's residents age 66 to 84 years of age equal one out of every six Bay Area residents. By

Bay Area WDA Labor Force Projections by Age



Source: DWD, Office of Economic Advisors, August 2004

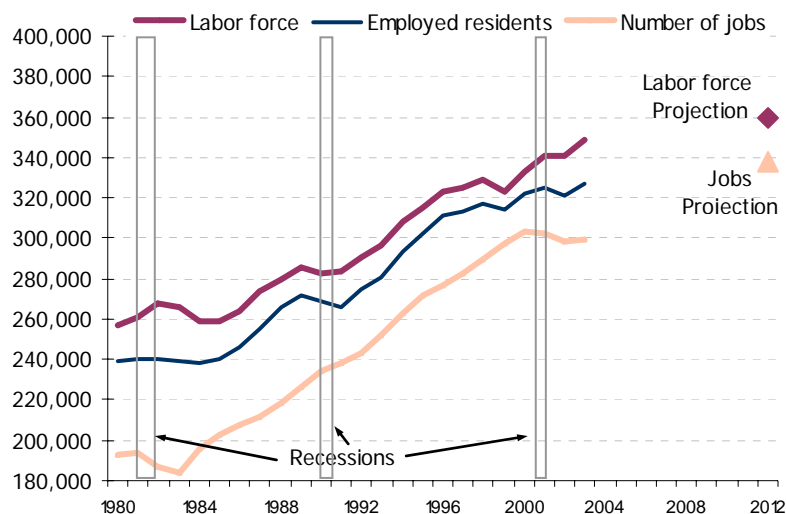
2030, when the baby boomer generation reaches these ages, they will comprise one out of every four residents. This group will grow from 100,161 residents to 183,134 residents over the next 25 years. Currently this group makes up the 35 to 59 year age cohort in the area. They make up just over one third of the area's population and over half of the population aged 20 through 69, the prime working age population.

Broad age group analysis of the Bay Area shows that those aged 19 years and younger will increase by over 6,600 (4.0 percent) between 2005 to 2030. However, the percent of this group of the total population will drop from 27 percent in 2005 to 24.3 percent in 2030. The number of those between 20 and 65 years, ones' prime working years, will increase by 4.02 percent also, however, this group will make up 53.4 percent of the population compared to 59.4 percent of the population in 2005. The number of residents aged 65 and older is projected to increase by 88.4 percent. The projections show this group growing from 13.6 percent of the area's population in 2005 to 22.2 percent of the population in 2030. While the number of workers in the prime working aged population will increase slightly (13,269) the majority of increase occurs between the ages of 60 and 64. Looking at the population aged 20 to age 59, the population of this group actually declines 0.1 percent (-1992), the growth in population is actually in the 60 to 64 aged group. This creates difficulty when it comes to economic expansion in the area. Where does one find additional workers?

The graph on the lower right of the previous page paints a scenario of what the projected Bay Area WDA labor force will look like—by age. This scenario assumes that labor force participation rates by age, as measured by the U.S. Census, will maintain their current levels throughout year 2020. Crossing these participation rates with population projections and incorporating the projected changes in the labor force participation rate forecast nationally by the U.S. Bureau of Labor Statistics helps to estimate the local projected labor force. The regional labor force is projected to grow 17.2 percent from 2000 to 2020

The slower labor force growth and age composition will bring about a multitude workforce development issues to contend with during this time period. One issue is that there will be shortage of younger of workers "in the pipeline" to replace those who are leaving the workforce permanently or are progressing up the ladder of their careers. There are many occupations that are typically filled by those of a certain age

Historic & Projected Labor Force & Jobs in Bay Area WDA



Source: WI DWD, Bureau of Workforce Information & Office of Economic Advisors

bracket, usually entry-level occupations. But there are other occupations typically requiring post-secondary/vocational education or skill set that will also be in need of new (read: younger) workers such as in nursing and various other healthcare occupations. The loss of institutional knowledge of retirees could also have quite an impact.

The economy will change as the population ages meaning that the services and goods in demand will change as consumer behavior changes. There is no better example of this than the healthcare industry. An increase in age and an increased demand for healthcare services are positively correlated to the need for workers.

The workforce development profiles are produced by the Office of Economic Advisors in the Wisconsin Department of Workforce Development. The author of this profile and regional contact for additional labor market information is:

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